Exploring Aeronautics			
2004 Mathematics			
Performance Standards			
Georgia Mathematics			
Grade 5			
Activity/Lesson	**State**	**Standards**	
Wings(177-208)	GA	MA.5.M5M1.a	Estimate the area of geometric plane figures.
Wings(177-208)	GA	MA.5.M5M1.d	Find the areas of triangles and parallelograms using formulae.
Wings(177-208)	GA	MA.5.M5M1.f	Find the area of a polygon (regular and irregular) by dividing it into squares, rectangles, and/or triangles and find the sum of the areas of those shapes.
Science of Flight	GA	MA.5.M5D2	Students will collect, organize, and display data using the most appropriate graph.
Integrating with Aeronautics	GA	MA.5.M5N4.i	Estimate products and quotients.
Integrating with Aeronautics	GA	MA.5.M5M1.e	Estimate the area of a circle through partitioning and tiling.
Integrating with Aeronautics	GA	MA.5.M5A1.a	Use variables, such as n or x, for unknown quantities in algebraic expressions.
Integrating with Aeronautics	GA	MA.5.M5A1.b	Investigate simple algebraic expressions by substituting numbers for the unknown.
Integrating with Aeronautics	GA	MA.5.M5D1.c	Determine and justify the mean, range, mode, and median of a set of data.
Scientific Method(124-144)	GA	MA.5.M5D2	Students will collect, organize, and display data using the most appropriate graph.
Exploring Aeronautics			
2004 Mathematics			
Performance Standards			
Georgia Mathematics			
Grade 6			
Activity/Lesson	**State**	**Standards**	
Fundamentals of Aeronautics (145-176)	GA	MA.6.M6M2.a	Measure length to the nearest half, fourth, eighth and sixteenth of an inch.
Wings(177-208)	GA	MA.6.M6M4.c	Estimate the surface area of simple geometric solids.
Science of Flight	GA	MA.6.M6D1.a	Formulate questions that can be answered by data. Students should collect data by using samples from a larger population (surveys), or by conducting experiments.
Science of Flight	GA	MA.6.M6D2.a	Predict the probability of a given event through trials/simulations (experimental probability), and represent the probability as a ratio.
Science of Flight	GA	MA.6.M6D1.e	Relate the data analysis to the context of the questions posed.
Integrating with Aeronautics	GA	MA.6.M6G1.c	Use the concepts of ratio, proportion and scale factor to demonstrate the relationships between similar plane figures.

Integrating with Aeronautics	GA	MA.6.M6A1	Students will understand the concept of ratio and use it to represent quantitative relationships.
Integrating with Aeronautics	GA	MA.6.M6D1.b	Using data, construct frequency distributions, frequency tables, and graphs.
Scientific Method(124-144)	GA	MA.6.M6D1.a	Formulate questions that can be answered by data. Students should collect data by using samples from a larger population (surveys), or by conducting experiments.
Scientific Method(124-144)	GA	MA.6.M6D1.e	Relate the data analysis to the context of the questions posed.
Exploring Aeronautics			
2004 Mathematics			
Performance Standards			
Georgia Mathematics			
Grade 7			
Activity/Lesson	**State**	**Standards**	
The Resource Center	GA	MA.7.M7N1.a	Find the absolute value of a number and understand it as the distance from zero on a number line.
The Resource Center	GA	MA.7.M7N1.b	Compare and order rational numbers, including repeating decimals.
Science of Flight	GA	MA.7.M7D1.a	Formulate questions and collect data from a census of at least 30 objects and from samples of varying sizes.
Science of Flight	GA	MA.7.M7D1.g	Analyze and draw conclusions about data, including describing the relationship between two variables.
Integrating with Aeronautics	GA	MA.7.M7N1.a	Find the absolute value of a number and understand it as the distance from zero on a number line.
Integrating with Aeronautics	GA	MA.7.M7A1.c	Add and subtract linear expressions.
Integrating with Aeronautics	GA	MA.7.M7A2.a	Given a problem, define a variable, write an equation, solve the equation, and interpret the solution.
Integrating with Aeronautics	GA	MA.7.M7G3.b	Understand the relationships among scale factors, length ratios, and area ratios between similar figures. Use scale factors, length ratios, and area ratios to determine side lengths and areas of similar geometric figures.
Integrating with Aeronautics	GA	MA.7.M7D1.f	Analyze data using appropriate graphs, including pictographs, histograms, bar graphs, line graphs, circle graphs, and line plots introduced earlier, and using box-and-whisker plots and scatter plots.
Scientific Method(124-144)	GA	MA.7.M7D1.g	Analyze and draw conclusions about data, including describing the relationship between two variables.
Exploring Aeronautics			
2004 Mathematics			

Performance Standards			
Georgia Mathematics			
Grade 8			
Activity/Lesson	**State**	**Standards**	
Science of Flight	GA	MA.8.M8D4.a	Gather data that can be modeled with a linear function.
Integrating with Aeronautics	GA	MA.8.M8G2.a	Apply properties of right triangles, including the Pythagorean theorem.
Integrating with Aeronautics	GA	MA.8.M8G2.b	Recognize and interpret the Pythagorean theorem as a statement about areas of squares on the sides of a right triangle.
Integrating with Aeronautics	GA	MA.8.M8A3.i	Translate among verbal, tabular, graphic, and algebraic representations of functions.
Integrating with Aeronautics	GA	MA.8.M8A1.d	Solve equations involving several variables for one variable in terms of the others.
Integrating with Aeronautics	GA	MA.8.M8A5.c	Graph the solution set of a system of linear inequalities in two variables.
Scientific Method(124-144)	GA	MA.8.M8D4.a	Gather data that can be modeled with a linear function.